Laboratory Report Number: L13110146

Mark Lyon
Environmental Waste Solutions
2440 Louisiana Blvd
Albuquerque, NM 87110

Please find enclosed the analytical results for the samples you submitted to Microbac
Laboratories. Review and compilation of your report was completed by Microbac's Ohio
Valley Division (OVD). If you have any questions, comments, or require further assistance
regarding this report, please contact your service representative listed below.

Laboratory Contact:
Stephanie Mossburg – Team Chemist/Data Specialist
(740) 373-4071
Stephanie.Mossburg@microbac.com

*I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and
conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the
report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results
for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for
each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the
written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related
only to the samples analyzed as received.*

This report was certified on November 18 2013

David Vandenberg – Managing Director

State of Origin: NM
Accrediting Authority: N/A ID:N/A
QAPP: DOD Ver 4.1 without flagging

Microbac Laboratories * Ohio Valley Division
158 Starlite Drive, Marietta, OH 45750 * T: (740) 373-4071 F: (740) 373-4835 * www.microbac.com

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Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

The following discrepancies were noted:

Discrepancy	Resolution
All samples for PO4 were received out of hold except for the two we received on Saturday. The IDs for those 2 samples are: CLS MPL 3-113-2 and MPL 2-113-1	Please proceed with analyzes per client.
The sample(s) were out of the acceptable pH range: CLS MPL 4-1113-MS: the PH was out on 1 of 2 metals bottles. MPL 4-1113-MSD: the PH was out on 1 of 2 metals bottles. MPL 3-113-1: the PH was out on 1 of 2 metals bottles. Added 5ml HNO3 Lot#: RGT 28449 11/04/13 @ 1500 to each sample ID. PH did adjust. CLS	Please adjust.

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
00110212	I	0.0		100224111016000457500080433437731	X
14581	I	2.0		34575011110000017970645980612010	X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	No
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	No
12	Were VOA samples free of headspace (less than 6mm)?	Yes

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Lab Report #: L13110146
Lab Project #: 3005.011
Project Name: White Sands MR
Lab Contact: Stephanie Mossburg

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Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MPL 4-1113-1	L13110146-01	11/01/2013 10:30	11/02/2013 09:00
MPL 4-1113-MS	L13110146-02	11/01/2013 10:30	11/02/2013 09:00
MPL 4-1113-MSD	L13110146-03	11/01/2013 10:30	11/02/2013 09:00
MPL 3-1113-1	L13110146-04	11/01/2013 13:30	11/02/2013 09:00
MPL 3-1113-2	L13110146-05	11/01/2013 13:30	11/02/2013 09:00
MPL 2-1113-1	L13110146-06	11/01/2013 15:25	11/02/2013 09:00

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Login Number: L13110146
Department: Conventionals
Analyst: Dorothy Payne

METHOD

Analysis SW846 9040C,9045D/EPA 150.1/SM4500-H B (pH)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74596
Approved By: Deanna Hesson

Login Number: L13110146
Department: Metals
Analyst: Qin Xu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG451848 - All acceptance criteria were met.

Matrix Spikes: WG451848 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 02(MS) and 03(MSD) yielded noncompliant recoveries for two analytes.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 74162
Approved By: Maren Beery

Maren Beery

Login Number: L13110146
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG451689 - All acceptance criteria were met.

Matrix Spikes: WG451689 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 02(MS) and 03(MSD) met all acceptance criteria.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 74076
Approved By: Sheri Pfalzgraf

Sheri L. Pfalzgraf

Login Number: L13110146
Department: General Chromatography
Analyst: Jeremy Kinney

METHOD

Analysis EPA300.0/SW846 9056

HOLDING TIMES

Sample Analysis: Hold times for NO2 and NO3 are 48 hours and the hold times for F, Cl, Br, and SO4 are 28 days. The hold time forms calculate the hold time based on 48 hours. All samples were analyzed in hold.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All fractions were analyzed at dilutions only due to one or more of the target analytes being near or greater than the ICAL.

MANUAL INTEGRATION: No manual integration was required.

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Narrative ID: 74182
Approved By: Mike Cochran

Generated at Nov 11, 2013 11:34

Generated: 11/18/2013 09:48

Login Number: L13110146
Department: Conventionals
Analyst: Brice Fenton

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: Recoveries out of range were observed for the following analytes: Alkalinity, Carbonate (as CaCO3), Alkalinity, Total (as CaCO3). Please see the applicable QC report for a detailed presentation of the failures.

Sample #	Analyte	Date	Result	Lower	Upper	Type
L13110146-02	Alkalinity, Carbonate (as CaCO3)	2013-11-06 11:14:30	0.000	85	115	Recovery
L13110146-03	Alkalinity, Total (as CaCO3)	2013-11-06 11:15:24	127	85	115	Recovery

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74594

Approved By: Deanna Hesson

Deanna Hesson

Generated at Nov 17, 2013 13:43

Generated: 11/18/2013 09:48

Login Number: L13110146
Department: Conventionals
Analyst:

METHOD

Analysis SW846 9014/9010C/SM4500-CN-C,E-20th (Cyanide)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Cyanide-Ammenable is the difference between the total cyanide and the treated cyanide. The LCS is analyzed to show that all of the cyanide is ammenable (the treated portion is ND). The LCS forms cannot calculate cyanide ammenable. The LCS is acceptable.

Sample #	Analyte	Date	Result	Lower	Upper	Type
WG451865-02	Cyanide	2013-11-08 15:30:04	8.00	90	110	Recovery

Matrix Spikes: Recoveries out of range were observed for the following analytes: Cyanide, Weak/Dissociable. Please see the applicable QC report for a detailed presentation of the failures.

Sample #	Analyte	Date	Result	Lower	Upper	Type
L13110146-02	Cyanide, Weak/Dissociable	2013-11-06 15:50:05	37.3	90	110	Recovery
L13110146-03	Cyanide, Weak/Dissociable	2013-11-06 15:50:06	50.9	90	110	Recovery

Duplicates: All acceptance criteria were met.

SAMPLES

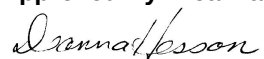**Samples:** All acceptance criteria were met.

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Narrative ID: 74317
Approved By: Deanna Hesson

Deanna Hesson

Login Number: L13110146
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 120.1/SM2510 B (Conductivity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: Recoveries out of range were observed for the following analytes: Conductivity. Please see the applicable QC report for a detailed presentation of the failures.

Sample #	Analyte	Date	Result	Lower	Upper	Type
L13110146-02	Conductivity	2013-11-05 16:08:43	-2.22	0	0	Recovery
L13110146-03	Conductivity	2013-11-05 16:10:44	-2.82	0	0	Recovery

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74595

Approved By: Deanna Hesson

Deanna Hesson

Login Number: L13110146
Department: Conventionals
Analyst: Brice Fenton

METHOD

Analysis EPA 350.1/SM4500-NH3 B(NH3)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: Recoveries out of range were observed for the following analytes: Nitrogen, Ammonia. Please see the applicable QC report for a detailed presentation of the failures.

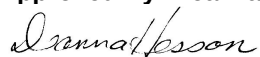| Sample #	Analyte	Date	Result	Lower	Upper	Type
L13110146-02	Nitrogen, Ammonia	2013-11-07 13:02:58	66.5	90	110	Recovery
L13110146-03	Nitrogen, Ammonia	2013-11-07 13:04:28	69.5	90	110	Recovery

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74597

Approved By: Deanna Hesson

Deanna Hesson

Generated at Nov 17, 2013 13:43

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Login Number: L13110146
Department: Conventionals
Analyst: Brice Fenton

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

Sample Analysis: The instrument used for the analysis of nitrate only analyzes for nitrate-nitrite (NO3NO2) which is the amount of total nitrate (NO3) and nitrite (NO2) combined. The NO3 concentration is determined by analyzing for NO3NO2 and NO2 and calculating NO3 by the difference. An unpreserved bottle only has a 48 hour hold time for NO3 and NO2 separately. However if the bottle is preserved with sulfuric acid, the hold time for NO3NO2 is 28 days. The NO2 was analyzed within 48 hours. The NO3NO2 was analyzed from a preserved container within 28 days..

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: Recoveries out of range were observed for the following analytes: Nitrate-Nitrite (as N). Please see the applicable QC report for a detailed presentation of the failures.

Sample #	Analyte	Date	Result	Lower	Upper	Type
L13110146-03	Nitrate-Nitrite (as N)	2013-11-06 10:10:00	128	90	110	Recovery

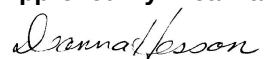**Duplicates:** All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74598
Approved By: Deanna Hesson

Deanna Hesson

Login Number: L13110146
Department: Conventionals
Analyst: Dorothy Payne

METHOD

Analysis EPA 365.2/SM4500-P E (Orthophosphate)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74599
Approved By: Deanna Hesson

Login Number: L13110146
Department: Conventionals
Analyst: April Greene

METHOD

Analysis EPA 160.1/SM2540 C(Total Dissolved Solids)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: Analytes were detected above the applicable reporting limit for the following analytes: Total Dissolved Solids. Please see the applicable QC report for a detailed presentation of the failures.

Sample #	Analyte	Date	Result	Lower	Upper	Type
WG451644-01	Total Dissolved Solids	2013-11-06 13:50:01	7.00		5.0	RL

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74602
Approved By: Deanna Hesson

Darna Ibsson

Generated at Nov 17, 2013 13:44

Generated: 11/18/2013 09:48

Login Number: L13110146
Department: Conventionals
Analyst: Brice Fenton

METHOD

Analysis Water: EPA 415.1/SM5310C/SW846 9060 (Total Organic Carbon)
Soil: Lloyd-Khan Methodology

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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verified by the following signature.

Narrative ID: 74600
Approved By: Deanna Hesson

Login Number: L13110146
Department: Conventionals
Analyst: April Greene

METHOD

Analysis EPA 160.2/SM2540 D (Total Suspended Solids)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 74601
Approved By: Deanna Hesson

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Certificate of Analysis

Sample #:	L13110146-01	**PrePrep Method:**	N/A	**Instrument:**	ICP-THERMO2
Client ID:	MPL 4-1113-1	**Prep Method:**	3015	**Prep Date:**	11/07/2013 07:36
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	11/07/2013 09:10
Workgroup #:	WG451848	**Analyst:**	QX	**Run Date:**	11/07/2013 12:03
Collect Date:	11/01/2013 10:30	**Dilution:**	1	**File ID:**	T2.110713.120323
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Calcium, Total	7440-70-2	81.1		0.500	0.250
Magnesium, Total	7439-95-4	16.0		0.500	0.250
Potassium, Total	7440-09-7	2.92		1.00	0.500
Sodium, Total	7440-23-5	29.5		0.500	0.250
Tin, Total	7440-31-5		U	0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.0100
U	Analyte was not detected. The concentration is below the reported LOD.				

Generated at Nov 18, 2013 09:44

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Certificate of Analysis

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** ICP-MS2	
Client ID: MPL 4-1113-1	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38	
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22	
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:17	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** NI.110613.131728	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00661		0.00100	0.000500
Barium, Total	7440-39-3	0.0636		0.00300	0.00150
Cadmium, Total	7440-43-9		U	0.000600	0.000300
Chromium, Total	7440-47-3	0.00260		0.00200	0.00100
Cobalt, Total	7440-48-4		U	0.00100	0.000500
Copper, Total	7440-50-8	0.00125	J	0.00200	0.00100
Lead, Total	7439-92-1		U	0.00100	0.000500
Manganese, Total	7439-96-5	0.00350		0.00200	0.00100
Nickel, Total	7440-02-0	0.00420		0.00400	0.00200
Selenium, Total	7782-49-2	0.0263		0.00100	0.000500
Silver, Total	7440-22-4		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** CVAA1
Client ID: MPL 4-1113-1	**Prep Method:** 7470A	**Prep Date:** 11/05/2013 07:28
Matrix: Water	**Analytical Method:** 7470A	**Cal Date:** 11/05/2013 13:19
Workgroup #: WG451542	**Analyst:** PDM	**Run Date:** 11/05/2013 13:44
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** M7.110513.134457
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** IC1
Client ID: MPL 4-1113-1	**Prep Method:** 300.0	**Prep Date:** 11/07/2013 12:03
Matrix: Water	**Analytical Method:** 300.0	**Cal Date:** 11/06/2013 10:26
Workgroup #: WG451877	**Analyst:** JBK	**Run Date:** 11/07/2013 18:22
Collect Date: 11/01/2013 10:30	**Dilution:** 5	**File ID:** I1_110713-25
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	62.9		1.00	0.500
Fluoride	16984-48-8		U	1.00	0.500
Sulfate	14808-79-8	147		5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** ORION-4STAR
Client ID: MPL 4-1113-1	**Prep Method:** 9040C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9040C	**Cal Date:**
Workgroup #: WG451388	**Analyst:** DLP	**Run Date:** 11/04/2013 16:29
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** OS13110513261301
Sample Tag:	**Units:** UNITS	

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.69		0.000	0.000
Temperature At Determination (C)		21.4		0.000	0.000

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-1	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:13
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.015
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	128		20.0	10.0

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-1	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:13
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.015
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 4-1113-1		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:13	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** S2131106002.015	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	128		20.0	10.0

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 4-1113-1		**Prep Method:** 9014-9010C		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 9014-9010C		**Cal Date:** 11/06/2013 11:30	
Workgroup #: WG451489		**Analyst:** DCM		**Run Date:** 11/06/2013 12:00	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** 1V.1311061200-04	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.372		0.0100	0.00500

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 4-1113-1		**Prep Method:** SM4500-CN-C,G-1999		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-CN-C,G-1999		**Cal Date:** 11/08/2013 09:20	
Workgroup #: WG451865		**Analyst:** DCM		**Run Date:** 11/08/2013 15:30	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** 1V.1311081530-14	
Sample Tag: DL02		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.372		0.0100	0.00500

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 4-1113-1		**Prep Method:** SM4500-CN-I		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-CN-I		**Cal Date:** 11/06/2013 10:20	
Workgroup #: WG451490		**Analyst:** DCM		**Run Date:** 11/06/2013 15:50	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** 1V.1311061550-04	
Sample Tag: DL01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0282		0.0100	0.00500

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Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** TIAMO1	
Client ID: MPL 4-1113-1		**Prep Method:** 120.1		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 120.1		**Cal Date:**	
Workgroup #: WG451389		**Analyst:** DIH		**Run Date:** 11/05/2013 16:06	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** TI.110513.1606CO	
Sample Tag: 01		**Units:** umhos/cm			

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		665		50.0	10.0

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM	
Client ID: MPL 4-1113-1		**Prep Method:** 350.1		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 350.1		**Cal Date:** 11/07/2013 12:33	
Workgroup #: WG451810		**Analyst:** BAF		**Run Date:** 11/07/2013 13:02	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** SC131107001.038	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	0.414		0.100	0.0500

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM	
Client ID: MPL 4-1113-1		**Prep Method:** 353.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 353.2		**Cal Date:** 11/05/2013 10:23	
Workgroup #: WG451545		**Analyst:** BAF		**Run Date:** 11/06/2013 10:10	
Collect Date: 11/01/2013 10:30		**Dilution:** 8		**File ID:** SC13110811290701	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		9.06		0.400	0.200

Sample #: L13110146-01		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 4-1113-1		**Prep Method:** SM4500-P-E-1999		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-P-E-1999		**Cal Date:** 10/30/2013 09:00	
Workgroup #: WG451383		**Analyst:** DLP		**Run Date:** 11/04/2013 15:45	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** 1V.1311041545-05	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.324		0.0500	0.0250

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Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-1	**Prep Method:** 160.1/SM2540C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-C-1997	**Cal Date:**
Workgroup #: WG451644	**Analyst:** ADG	**Run Date:** 11/06/2013 13:50
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311061350-04
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		520		20.0	10.0

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** TOC-VWP
Client ID: MPL 4-1113-1	**Prep Method:** 415.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 415.1	**Cal Date:** 07/09/2013 14:51
Workgroup #: WG451372	**Analyst:** BAF	**Run Date:** 11/04/2013 22:41
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** TC11042013.028
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	1.46		1.00	0.500

Sample #: L13110146-01	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-1	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311060659-19
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids		4.00	J	5.00	2.50
J	Estimated value ; the analyte concentration was less than the LOQ.				

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Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** ICP-THERMO2
Client ID: MPL 4-1113-MS	**Prep Method:** 3015	**Prep Date:** 11/07/2013 07:36
Matrix: Water	**Analytical Method:** 6010B	**Cal Date:** 11/07/2013 09:10
Workgroup #: WG451848	**Analyst:** QX	**Run Date:** 11/07/2013 12:06
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** T2.110713.120654
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7	0.0310		0.00200	0.00100
Calcium, Total	7440-70-2	98.9		0.500	0.250
Magnesium, Total	7439-95-4	24.2		0.500	0.250
Potassium, Total	7440-09-7	33.9		1.00	0.500
Sodium, Total	7440-23-5	64.4		0.500	0.250
Tin, Total	7440-31-5	0.624		0.500	0.250
Vanadium, Total	7440-62-2	0.624		0.0100	0.00500
Zinc, Total	7440-66-6	0.623		0.0200	0.0100

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** ICP-MS2
Client ID: MPL 4-1113-MS	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:20
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** NI.110613.132033
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.0685		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0757		0.00100	0.000500
Barium, Total	7440-39-3	0.129		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0659		0.000600	0.000300
Chromium, Total	7440-47-3	0.0672		0.00200	0.00100
Cobalt, Total	7440-48-4	0.0650		0.00100	0.000500
Copper, Total	7440-50-8	0.0647		0.00200	0.00100
Lead, Total	7439-92-1	0.0657		0.00100	0.000500
Manganese, Total	7439-96-5	0.0677		0.00200	0.00100
Nickel, Total	7440-02-0	0.0684		0.00400	0.00200
Selenium, Total	7782-49-2	0.0992		0.00100	0.000500
Silver, Total	7440-22-4	0.0648		0.00100	0.000500
Thallium, Total	7440-28-0	0.0663		0.000200	0.000100

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Sample #: L13110146-02		**PrePrep Method:** N/A		**Instrument:** CVAA1	
Client ID: MPL 4-1113-MS		**Prep Method:** 7470A		**Prep Date:** 11/05/2013 07:28	
Matrix: Water		**Analytical Method:** 7470A		**Cal Date:** 11/05/2013 13:19	
Workgroup #: WG451542		**Analyst:** PDM		**Run Date:** 11/05/2013 13:47	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** M7.110513.134729	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6	0.00482		0.000222	0.000111

Sample #: L13110146-02		**PrePrep Method:** N/A		**Instrument:** IC1	
Client ID: MPL 4-1113-MS		**Prep Method:** 300.0		**Prep Date:** 11/07/2013 12:03	
Matrix: Water		**Analytical Method:** 300.0		**Cal Date:** 11/06/2013 10:26	
Workgroup #: WG451877		**Analyst:** JBK		**Run Date:** 11/07/2013 19:32	
Collect Date: 11/01/2013 10:30		**Dilution:** 5		**File ID:** I1_110713-29	
Sample Tag: DL01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	71.4		1.00	0.500
Fluoride	16984-48-8	7.53		1.00	0.500
Sulfate	14808-79-8	188		5.00	2.50

Sample #: L13110146-02		**PrePrep Method:** N/A		**Instrument:** ORION-4STAR	
Client ID: MPL 4-1113-MS		**Prep Method:** 9040C		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 9040C		**Cal Date:**	
Workgroup #: WG451388		**Analyst:** DLP		**Run Date:** 11/04/2013 16:30	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** OS13110513262401	
Sample Tag:		**Units:** UNITS			

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.71		0.000	0.000
Temperature At Determination (C)		21.4		0.000	0.000

Sample #: L13110146-02		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 4-1113-MS		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:14	
Collect Date: 11/01/2013 10:30		**Dilution:** 1		**File ID:** S2131106002.017	
Sample Tag: 01		**Units:** mg/L			

Lab Report #: L13110146
Lab Project #: 3005.011
Project Name: White Sands MR
Lab Contact: Stephanie Mossburg

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Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-MS	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:14
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.017
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	216		20.0	10.0

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-MS	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:14
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.017
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	216		20.0	10.0

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MS	**Prep Method:** SM4500-CN-I	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-I	**Cal Date:** 11/06/2013 10:20
Workgroup #: WG451490	**Analyst:** DCM	**Run Date:** 11/06/2013 15:50
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311061550-05
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0431		0.0100	0.00500

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MS	**Prep Method:** 9014-9010C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9014-9010C	**Cal Date:** 11/06/2013 11:30
Workgroup #: WG451489	**Analyst:** DCM	**Run Date:** 11/06/2013 12:00
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311061200-05
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.386		0.0100	0.00500

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Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MS	**Prep Method:** SM4500-CN-C,G-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-C,G-1999	**Cal Date:** 11/08/2013 09:20
Workgroup #: WG451865	**Analyst:** DCM	**Run Date:** 11/08/2013 15:30
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311081530-15
Sample Tag: DL02	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.386		0.0100	0.00500

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** TIAMO1
Client ID: MPL 4-1113-MS	**Prep Method:** 120.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 120.1	**Cal Date:**
Workgroup #: WG451389	**Analyst:** DIH	**Run Date:** 11/05/2013 16:08
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** TI.110513.1608CO
Sample Tag: 01	**Units:** umhos/cm	

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		633		50.0	10.0

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 4-1113-MS	**Prep Method:** 350.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 350.1	**Cal Date:** 11/07/2013 12:33
Workgroup #: WG451810	**Analyst:** BAF	**Run Date:** 11/07/2013 13:02
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** SC131107001.039
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	1.08		0.100	0.0500

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 4-1113-MS	**Prep Method:** 353.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 353.2	**Cal Date:** 11/05/2013 10:23
Workgroup #: WG451545	**Analyst:** BAF	**Run Date:** 11/06/2013 10:10
Collect Date: 11/01/2013 10:30	**Dilution:** 8	**File ID:** SC13110811291601
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		9.58		0.400	0.200

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Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MS	**Prep Method:** SM4500-P-E-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-P-E-1999	**Cal Date:** 10/30/2013 09:00
Workgroup #: WG451383	**Analyst:** DLP	**Run Date:** 11/04/2013 15:45
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311041545-08
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.704		0.0500	0.0250

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-MS	**Prep Method:** 160.1/SM2540C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-C-1997	**Cal Date:**
Workgroup #: WG451644	**Analyst:** ADG	**Run Date:** 11/06/2013 13:50
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311061350-05
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		1020		20.0	10.0

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** TOC-VWP
Client ID: MPL 4-1113-MS	**Prep Method:** 415.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 415.1	**Cal Date:** 07/09/2013 14:51
Workgroup #: WG451372	**Analyst:** BAF	**Run Date:** 11/04/2013 22:53
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** TC11042013.029
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	11.7		1.00	0.500

Sample #: L13110146-02	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-MS	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311060659-20
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids		28.0		5.00	2.50

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Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** ICP-THERMO2
Client ID: MPL 4-1113-MSD	**Prep Method:** 3015	**Prep Date:** 11/07/2013 07:36
Matrix: Water	**Analytical Method:** 6010B	**Cal Date:** 11/07/2013 09:10
Workgroup #: WG451848	**Analyst:** QX	**Run Date:** 11/07/2013 12:10
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** T2.110713.121011
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7	0.0303		0.00200	0.00100
Calcium, Total	7440-70-2	96.1		0.500	0.250
Magnesium, Total	7439-95-4	23.5		0.500	0.250
Potassium, Total	7440-09-7	33.3		1.00	0.500
Sodium, Total	7440-23-5	62.0		0.500	0.250
Tin, Total	7440-31-5	0.633		0.500	0.250
Vanadium, Total	7440-62-2	0.612		0.0100	0.00500
Zinc, Total	7440-66-6	0.612		0.0200	0.0100

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** ICP-MS2
Client ID: MPL 4-1113-MSD	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:23
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** NI.110613.132337
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.0679		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0760		0.00100	0.000500
Barium, Total	7440-39-3	0.129		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0662		0.000600	0.000300
Chromium, Total	7440-47-3	0.0684		0.00200	0.00100
Cobalt, Total	7440-48-4	0.0667		0.00100	0.000500
Copper, Total	7440-50-8	0.0664		0.00200	0.00100
Lead, Total	7439-92-1	0.0662		0.00100	0.000500
Manganese, Total	7439-96-5	0.0703		0.00200	0.00100
Nickel, Total	7440-02-0	0.0695		0.00400	0.00200
Selenium, Total	7782-49-2	0.101		0.00100	0.000500
Silver, Total	7440-22-4	0.0635		0.00100	0.000500
Thallium, Total	7440-28-0	0.0672		0.000200	0.000100

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Certificate of Analysis

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** CVAA1	
Client ID: MPL 4-1113-MSD	**Prep Method:** 7470A	**Prep Date:** 11/05/2013 07:28	
Matrix: Water	**Analytical Method:** 7470A	**Cal Date:** 11/05/2013 13:19	
Workgroup #: WG451542	**Analyst:** PDM	**Run Date:** 11/05/2013 13:50	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** M7.110513.135001	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6	0.00490		0.000222	0.000111

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** IC1	
Client ID: MPL 4-1113-MSD	**Prep Method:** 300.0	**Prep Date:** 11/07/2013 12:03	
Matrix: Water	**Analytical Method:** 300.0	**Cal Date:** 11/06/2013 10:26	
Workgroup #: WG451877	**Analyst:** JBK	**Run Date:** 11/07/2013 19:49	
Collect Date: 11/01/2013 10:30	**Dilution:** 5	**File ID:** I1_110713-30	
Sample Tag: DL01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	71.8		1.00	0.500
Fluoride	16984-48-8	7.55		1.00	0.500
Sulfate	14808-79-8	188		5.00	2.50

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** ORION-4STAR	
Client ID: MPL 4-1113-MSD	**Prep Method:** 9040C	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 9040C	**Cal Date:**	
Workgroup #: WG451388	**Analyst:** DLP	**Run Date:** 11/04/2013 16:31	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** OS13110513263401	
Sample Tag:	**Units:** UNITS		

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.69		0.000	0.000
Temperature At Determination (C)		21.3		0.000	0.000

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2	
Client ID: MPL 4-1113-MSD	**Prep Method:** 310.2	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:15	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.018	
Sample Tag: 01	**Units:** mg/L		

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Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	256		20.0	10.0

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-MSD	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:15
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.018
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 4-1113-MSD	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:15
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** S2131106002.018
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	256		20.0	10.0

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MSD	**Prep Method:** SM4500-CN-I	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-I	**Cal Date:** 11/06/2013 10:20
Workgroup #: WG451490	**Analyst:** DCM	**Run Date:** 11/06/2013 15:50
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311061550-06
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0486		0.0100	0.00500

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MSD	**Prep Method:** SM4500-CN-C,G-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-C,G-1999	**Cal Date:** 11/08/2013 09:20
Workgroup #: WG451865	**Analyst:** DCM	**Run Date:** 11/08/2013 15:30
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311081530-16
Sample Tag: DL02	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.390		0.0100	0.00500

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 4-1113-MSD	**Prep Method:** 9014-9010C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9014-9010C	**Cal Date:** 11/06/2013 11:30
Workgroup #: WG451489	**Analyst:** DCM	**Run Date:** 11/06/2013 12:00
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311061200-06
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.390		0.0100	0.00500

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Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** TIAMO1	
Client ID: MPL 4-1113-MSD	**Prep Method:** 120.1	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 120.1	**Cal Date:**	
Workgroup #: WG451389	**Analyst:** DIH	**Run Date:** 11/05/2013 16:10	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** TI.110513.1610CO	
Sample Tag: 01	**Units:** umhos/cm		

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		625		50.0	10.0

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM	
Client ID: MPL 4-1113-MSD	**Prep Method:** 350.1	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 350.1	**Cal Date:** 11/07/2013 12:33	
Workgroup #: WG451810	**Analyst:** BAF	**Run Date:** 11/07/2013 13:04	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** SC131107001.040	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	1.11		0.100	0.0500

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM	
Client ID: MPL 4-1113-MSD	**Prep Method:** 353.2	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 353.2	**Cal Date:** 11/05/2013 10:23	
Workgroup #: WG451545	**Analyst:** BAF	**Run Date:** 11/06/2013 10:10	
Collect Date: 11/01/2013 10:30	**Dilution:** 8	**File ID:** SC13110811292901	
Sample Tag:	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		9.70		0.400	0.200

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** UV-120-1V	
Client ID: MPL 4-1113-MSD	**Prep Method:** SM4500-P-E-1999	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** SM4500-P-E-1999	**Cal Date:** 10/30/2013 09:00	
Workgroup #: WG451383	**Analyst:** DLP	**Run Date:** 11/04/2013 15:45	
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** 1V.1311041545-09	
Sample Tag:	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.722		0.0500	0.0250

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Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-MSD	**Prep Method:** 160.1/SM2540C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-C-1997	**Cal Date:**
Workgroup #: WG451644	**Analyst:** ADG	**Run Date:** 11/06/2013 13:50
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311061350-06
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		1010		20.0	10.0

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** TOC-VWP
Client ID: MPL 4-1113-MSD	**Prep Method:** 415.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 415.1	**Cal Date:** 07/09/2013 14:51
Workgroup #: WG451372	**Analyst:** BAF	**Run Date:** 11/04/2013 23:06
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** TC11042013.030
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	11.1		1.00	0.500

Sample #: L13110146-03	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 4-1113-MSD	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59
Collect Date: 11/01/2013 10:30	**Dilution:** 1	**File ID:** EN.1311060659-21
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids		28.5		5.00	2.50

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** ICP-THERMO2
Client ID: MPL 3-1113-1	**Prep Method:** 3015	**Prep Date:** 11/07/2013 07:36
Matrix: Water	**Analytical Method:** 6010B	**Cal Date:** 11/07/2013 09:10
Workgroup #: WG451848	**Analyst:** QX	**Run Date:** 11/07/2013 12:13
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** T2.110713.121327
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Calcium, Total	7440-70-2	72.1		0.500	0.250
Magnesium, Total	7439-95-4	13.6		0.500	0.250

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Analyte	CAS #	Result	Qual	LOQ	LOD
Potassium, Total	7440-09-7	2.83		1.00	0.500
Sodium, Total	7440-23-5	31.1		0.500	0.250
Tin, Total	7440-31-5		U	0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0106	J	0.0200	0.0100
J	Estimated value ; the analyte concentration was less than the LOQ.
U	Analyte was not detected. The concentration is below the reported LOD.

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Certificate of Analysis

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** ICP-MS2
Client ID: MPL 3-1113-1	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:48
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** NI.110613.134817
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00687		0.00100	0.000500
Barium, Total	7440-39-3	0.0455		0.00300	0.00150
Cadmium, Total	7440-43-9		U	0.000600	0.000300
Chromium, Total	7440-47-3	0.00191	J	0.00200	0.00100
Cobalt, Total	7440-48-4		U	0.00100	0.000500
Copper, Total	7440-50-8		U	0.00200	0.00100
Lead, Total	7439-92-1		U	0.00100	0.000500
Manganese, Total	7439-96-5	0.00184	J	0.00200	0.00100
Nickel, Total	7440-02-0	0.00379	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.0272		0.00100	0.000500
Silver, Total	7440-22-4		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** CVAA1
Client ID: MPL 3-1113-1	**Prep Method:** 7470A	**Prep Date:** 11/05/2013 07:28
Matrix: Water	**Analytical Method:** 7470A	**Cal Date:** 11/05/2013 13:19
Workgroup #: WG451542	**Analyst:** MMB	**Run Date:** 11/05/2013 13:52
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** M7.110513.135234
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

Certificate of Analysis

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** IC1
Client ID: MPL 3-1113-1	**Prep Method:** 300.0	**Prep Date:** 11/07/2013 12:03
Matrix: Water	**Analytical Method:** 300.0	**Cal Date:** 11/06/2013 10:26
Workgroup #: WG451877	**Analyst:** JBK	**Run Date:** 11/07/2013 20:07
Collect Date: 11/01/2013 13:30	**Dilution:** 5	**File ID:** I1_110713-31
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	59.9		1.00	0.500
Fluoride	16984-48-8		U	1.00	0.500
Sulfate	14808-79-8	110		5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Certificate of Analysis

Sample #: L13110146-04		**PrePrep Method:** N/A		**Instrument:** ORION-4STAR	
Client ID: MPL 3-1113-1		**Prep Method:** 9040C		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 9040C		**Cal Date:**	
Workgroup #: WG451388		**Analyst:** DLP		**Run Date:** 11/04/2013 16:32	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** OS13110513264401	
Sample Tag:		**Units:** UNITS			

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.81		0.000	0.000
Temperature At Determination (C)		21.7		0.000	0.000

Sample #: L13110146-04		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-1		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:15	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** S2131106002.019	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	110		20.0	10.0

Sample #: L13110146-04		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-1		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:15	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** S2131106002.019	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	110		20.0	10.0

Sample #: L13110146-04		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-1		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:15	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** S2131106002.019	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0

Lab Report #: L13110146
Lab Project #: 3005.011
Project Name: White Sands MR
Lab Contact: Stephanie Mossburg

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U	Analyte was not detected. The concentration is below the reported LOD.

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Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 3-1113-1	**Prep Method:** SM4500-CN-I	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-I	**Cal Date:** 11/06/2013 10:20
Workgroup #: WG451490	**Analyst:** DCM	**Run Date:** 11/06/2013 15:50
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311061550-07
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0255		0.0100	0.00500

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 3-1113-1	**Prep Method:** SM4500-CN-C,G-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-C,G-1999	**Cal Date:** 11/08/2013 09:20
Workgroup #: WG451865	**Analyst:** DCM	**Run Date:** 11/08/2013 15:30
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311081530-17
Sample Tag: DL02	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.406		0.0100	0.00500

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 3-1113-1	**Prep Method:** 9014-9010C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9014-9010C	**Cal Date:** 11/06/2013 11:30
Workgroup #: WG451489	**Analyst:** DCM	**Run Date:** 11/06/2013 12:00
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311061200-07
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.406		0.0100	0.00500

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** TIAMO1
Client ID: MPL 3-1113-1	**Prep Method:** 120.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 120.1	**Cal Date:**
Workgroup #: WG451389	**Analyst:** DIH	**Run Date:** 11/05/2013 16:12
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** TI.110513.1612CO
Sample Tag: 01	**Units:** umhos/cm	

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		567		50.0	10.0

Generated at Nov 18, 2013 09:45

Generated: 11/18/2013 09:48

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Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 3-1113-1	**Prep Method:** 350.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 350.1	**Cal Date:** 11/07/2013 12:33
Workgroup #: WG451810	**Analyst:** BAF	**Run Date:** 11/07/2013 13:04
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** SC131107001.041
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	0.199		0.100	0.0500

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 3-1113-1	**Prep Method:** 353.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 353.2	**Cal Date:** 11/05/2013 10:23
Workgroup #: WG451545	**Analyst:** BAF	**Run Date:** 11/06/2013 10:10
Collect Date: 11/01/2013 13:30	**Dilution:** 4	**File ID:** SC13110811293801
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		7.86		0.200	0.100

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 3-1113-1	**Prep Method:** SM4500-P-E-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-P-E-1999	**Cal Date:** 10/30/2013 09:00
Workgroup #: WG451383	**Analyst:** DLP	**Run Date:** 11/04/2013 15:45
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311041545-06
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.0970		0.0500	0.0250

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 3-1113-1	**Prep Method:** 160.1/SM2540C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-C-1997	**Cal Date:**
Workgroup #: WG451562	**Analyst:** ADG	**Run Date:** 11/05/2013 14:41
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** EN.1311051441-04
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		368		20.0	10.0

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Certificate of Analysis

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** TOC-VWP
Client ID: MPL 3-1113-1	**Prep Method:** 415.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 415.1	**Cal Date:** 07/09/2013 14:51
Workgroup #: WG451372	**Analyst:** BAF	**Run Date:** 11/04/2013 23:18
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** TC11042013.031
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	1.54		1.00	0.500

Sample #: L13110146-04	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 3-1113-1	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** EN.1311060659-22
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids			U	5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** ICP-THERMO2
Client ID: MPL 3-1113-2	**Prep Method:** 3015	**Prep Date:** 11/07/2013 07:36
Matrix: Water	**Analytical Method:** 6010B	**Cal Date:** 11/07/2013 09:10
Workgroup #: WG451848	**Analyst:** QX	**Run Date:** 11/07/2013 12:30
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** T2.110713.123056
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Calcium, Total	7440-70-2	73.0		0.500	0.250
Magnesium, Total	7439-95-4	13.8		0.500	0.250
Potassium, Total	7440-09-7	2.81		1.00	0.500
Sodium, Total	7440-23-5	31.8		0.500	0.250
Tin, Total	7440-31-5		U	0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0109	J	0.0200	0.0100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** ICP-MS2
Client ID: MPL 3-1113-2	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:51
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** NI.110613.135121
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00695		0.00100	0.000500
Barium, Total	7440-39-3	0.0455		0.00300	0.00150
Cadmium, Total	7440-43-9		U	0.000600	0.000300
Chromium, Total	7440-47-3	0.00184	J	0.00200	0.00100
Cobalt, Total	7440-48-4		U	0.00100	0.000500
Copper, Total	7440-50-8		U	0.00200	0.00100
Lead, Total	7439-92-1		U	0.00100	0.000500
Manganese, Total	7439-96-5	0.00187	J	0.00200	0.00100
Nickel, Total	7440-02-0	0.00328	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.0274		0.00100	0.000500
Silver, Total	7440-22-4		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** CVAA1
Client ID: MPL 3-1113-2	**Prep Method:** 7470A	**Prep Date:** 11/05/2013 07:28
Matrix: Water	**Analytical Method:** 7470A	**Cal Date:** 11/05/2013 13:19
Workgroup #: WG451542	**Analyst:** PDM	**Run Date:** 11/05/2013 13:55
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** M7.110513.135507
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** IC1
Client ID: MPL 3-1113-2	**Prep Method:** 300.0	**Prep Date:** 11/07/2013 12:03
Matrix: Water	**Analytical Method:** 300.0	**Cal Date:** 11/06/2013 10:26
Workgroup #: WG451877	**Analyst:** JBK	**Run Date:** 11/07/2013 20:42
Collect Date: 11/01/2013 13:30	**Dilution:** 5	**File ID:** I1_110713-33
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	62.0		1.00	0.500
Fluoride	16984-48-8		U	1.00	0.500
Sulfate	14808-79-8	114		5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** ORION-4STAR	
Client ID: MPL 3-1113-2	**Prep Method:** 9040C	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 9040C	**Cal Date:**	
Workgroup #: WG451380	**Analyst:** DLP	**Run Date:** 11/02/2013 12:47	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** OS13110611185601	
Sample Tag:	**Units:** UNITS		

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	8.12		0.000	0.000
Temperature At Determination (C)		18.0		0.000	0.000

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-2	**Prep Method:** 310.2	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:16	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** S2131106002.020	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-05		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-2		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:16	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** S2131106002.020	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	108		20.0	10.0

Sample #: L13110146-05		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM2	
Client ID: MPL 3-1113-2		**Prep Method:** 310.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 310.2		**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428		**Analyst:** BAF		**Run Date:** 11/06/2013 11:16	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** S2131106002.020	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	108		20.0	10.0

Sample #: L13110146-05		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 3-1113-2		**Prep Method:** SM4500-CN-I		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-CN-I		**Cal Date:** 11/06/2013 10:20	
Workgroup #: WG451490		**Analyst:** DCM		**Run Date:** 11/06/2013 15:50	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** 1V.1311061550-08	
Sample Tag: DL01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0366		0.0100	0.00500

Sample #: L13110146-05		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 3-1113-2		**Prep Method:** SM4500-CN-C,G-1999		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-CN-C,G-1999		**Cal Date:** 11/08/2013 09:20	
Workgroup #: WG451865		**Analyst:** DCM		**Run Date:** 11/08/2013 15:30	
Collect Date: 11/01/2013 13:30		**Dilution:** 1		**File ID:** 1V.1311081530-18	
Sample Tag: DL02		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.392		0.0100	0.00500

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 3-1113-2	**Prep Method:** 9014-9010C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9014-9010C	**Cal Date:** 11/06/2013 11:30
Workgroup #: WG451489	**Analyst:** DCM	**Run Date:** 11/06/2013 12:00
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311061200-08
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.393		0.0100	0.00500

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** TIAMO1
Client ID: MPL 3-1113-2	**Prep Method:** 120.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 120.1	**Cal Date:**
Workgroup #: WG451389	**Analyst:** DIH	**Run Date:** 11/05/2013 16:14
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** TI.110513.1614CO
Sample Tag: 01	**Units:** umhos/cm	

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		566		50.0	10.0

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 3-1113-2	**Prep Method:** 350.1	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 350.1	**Cal Date:** 11/07/2013 12:33
Workgroup #: WG451814	**Analyst:** BAF	**Run Date:** 11/07/2013 13:10
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** SC131107001.047
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	0.266		0.100	0.0500

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM
Client ID: MPL 3-1113-2	**Prep Method:** 353.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 353.2	**Cal Date:** 11/05/2013 10:23
Workgroup #: WG451545	**Analyst:** BAF	**Run Date:** 11/06/2013 10:10
Collect Date: 11/01/2013 13:30	**Dilution:** 8	**File ID:** SC13110811294501
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		8.46		0.400	0.200

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Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** UV-120-1V	
Client ID: MPL 3-1113-2	**Prep Method:** SM4500-P-E-1999	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** SM4500-P-E-1999	**Cal Date:** 10/30/2013 09:00	
Workgroup #: WG451379	**Analyst:** DLP	**Run Date:** 11/02/2013 13:30	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** 1V.1311021330-06	
Sample Tag:	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.102		0.0500	0.0250

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** OVEN	
Client ID: MPL 3-1113-2	**Prep Method:** 160.1/SM2540C	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** SM2540-C-1997	**Cal Date:**	
Workgroup #: WG451562	**Analyst:** ADG	**Run Date:** 11/05/2013 14:41	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** EN.1311051441-05	
Sample Tag:	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		376		20.0	10.0

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** TOC-VWP	
Client ID: MPL 3-1113-2	**Prep Method:** 415.1	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 415.1	**Cal Date:** 07/09/2013 14:51	
Workgroup #: WG451372	**Analyst:** BAF	**Run Date:** 11/04/2013 23:30	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** TC11042013.032	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	1.66		1.00	0.500

Sample #: L13110146-05	**PrePrep Method:** N/A	**Instrument:** OVEN	
Client ID: MPL 3-1113-2	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**	
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59	
Collect Date: 11/01/2013 13:30	**Dilution:** 1	**File ID:** EN.1311060659-23	
Sample Tag:	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids			U	5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** ICP-THERMO2	
Client ID: MPL 2-1113-1		**Prep Method:** 3015		**Prep Date:** 11/07/2013 07:36	
Matrix: Water		**Analytical Method:** 6010B		**Cal Date:** 11/07/2013 09:10	
Workgroup #: WG451848		**Analyst:** QX		**Run Date:** 11/07/2013 12:34	
Collect Date: 11/01/2013 15:25		**Dilution:** 1		**File ID:** T2.110713.123426	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Calcium, Total	7440-70-2	61.1		0.500	0.250
Magnesium, Total	7439-95-4	11.3		0.500	0.250
Potassium, Total	7440-09-7	2.76		1.00	0.500
Sodium, Total	7440-23-5	30.1		0.500	0.250
Tin, Total	7440-31-5		U	0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0104	J	0.0200	0.0100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** ICP-MS2
Client ID: MPL 2-1113-1	**Prep Method:** 3015	**Prep Date:** 11/06/2013 07:38
Matrix: Water	**Analytical Method:** 6020	**Cal Date:** 11/06/2013 09:22
Workgroup #: WG451689	**Analyst:** JYH	**Run Date:** 11/06/2013 13:54
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** NI.110613.135425
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00789		0.00100	0.000500
Barium, Total	7440-39-3	0.0632		0.00300	0.00150
Cadmium, Total	7440-43-9		U	0.000600	0.000300
Chromium, Total	7440-47-3	0.00253		0.00200	0.00100
Cobalt, Total	7440-48-4		U	0.00100	0.000500
Copper, Total	7440-50-8	0.00129	J	0.00200	0.00100
Lead, Total	7439-92-1		U	0.00100	0.000500
Manganese, Total	7439-96-5	0.00975		0.00200	0.00100
Nickel, Total	7440-02-0	0.00316	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.0312		0.00100	0.000500
Silver, Total	7440-22-4		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** CVAA1	
Client ID: MPL 2-1113-1		**Prep Method:** 7470A		**Prep Date:** 11/05/2013 07:28	
Matrix: Water		**Analytical Method:** 7470A		**Cal Date:** 11/05/2013 13:19	
Workgroup #: WG451542		**Analyst:** PDM		**Run Date:** 11/05/2013 13:57	
Collect Date: 11/01/2013 15:25		**Dilution:** 1		**File ID:** M7.110513.135741	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** IC1
Client ID: MPL 2-1113-1	**Prep Method:** 300.0	**Prep Date:** 11/07/2013 12:03
Matrix: Water	**Analytical Method:** 300.0	**Cal Date:** 11/06/2013 10:26
Workgroup #: WG451877	**Analyst:** JBK	**Run Date:** 11/07/2013 20:24
Collect Date: 11/01/2013 15:25	**Dilution:** 5	**File ID:** I1_110713-32
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	53.9		1.00	0.500
Fluoride	16984-48-8		U	1.00	0.500
Sulfate	14808-79-8	74.0		5.00	2.50
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** ORION-4STAR	
Client ID: MPL 2-1113-1	**Prep Method:** 9040C	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 9040C	**Cal Date:**	
Workgroup #: WG451380	**Analyst:** DLP	**Run Date:** 11/02/2013 12:44	
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** OS13110611190601	
Sample Tag:	**Units:** UNITS		

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.47		0.000	0.000
Temperature At Determination (C)		17.5		0.000	0.000

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2	
Client ID: MPL 2-1113-1	**Prep Method:** 310.2	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:18	
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** S2131106002.023	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)	11-43-8	90.0		20.0	10.0

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2	
Client ID: MPL 2-1113-1	**Prep Method:** 310.2	**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09	
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:18	
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** S2131106002.023	
Sample Tag: 01	**Units:** mg/L		

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)	13-01-4		U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

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Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** SMARTCHEM2
Client ID: MPL 2-1113-1	**Prep Method:** 310.2	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 310.2	**Cal Date:** 11/06/2013 11:09
Workgroup #: WG451428	**Analyst:** BAF	**Run Date:** 11/06/2013 11:18
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** S2131106002.023
Sample Tag: 01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)	13-00-3	90.0		20.0	10.0

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 2-1113-1	**Prep Method:** SM4500-CN-I	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-I	**Cal Date:** 11/06/2013 10:20
Workgroup #: WG451490	**Analyst:** DCM	**Run Date:** 11/06/2013 15:50
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** 1V.1311061550-09
Sample Tag: DL01	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Weak/Dissociable	57-12-5	0.0301		0.0100	0.00500

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 2-1113-1	**Prep Method:** SM4500-CN-C,G-1999	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM4500-CN-C,G-1999	**Cal Date:** 11/08/2013 09:20
Workgroup #: WG451865	**Analyst:** DCM	**Run Date:** 11/08/2013 15:30
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** 1V.1311081530-19
Sample Tag: DL02	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide, Amenable to Chlor.	57-12-5	0.205		0.0100	0.00500

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** UV-120-1V
Client ID: MPL 2-1113-1	**Prep Method:** 9014-9010C	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** 9014-9010C	**Cal Date:** 11/06/2013 11:30
Workgroup #: WG451489	**Analyst:** DCM	**Run Date:** 11/06/2013 12:00
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** 1V.1311061200-09
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Cyanide	57-12-5	0.205		0.0100	0.00500

Generated at Nov 18, 2013 09:45

L13110146 / Revision: 0 / 85 total pages

Generated: 11/18/2013 09:48

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Certificate of Analysis

Sample #: L13110146-06	**PrePrep Method:** N/A			**Instrument:** TIAMO1	
Client ID: MPL 2-1113-1	**Prep Method:** 120.1			**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 120.1			**Cal Date:**	
Workgroup #: WG451389	**Analyst:** DIH			**Run Date:** 11/05/2013 16:16	
Collect Date: 11/01/2013 15:25	**Dilution:** 1			**File ID:** TI.110513.1616CO	
Sample Tag: 01	**Units:** umhos/cm				

Analyte	CAS #	Result	Qual	LOQ	LOD
Conductivity		503		50.0	10.0

Sample #: L13110146-06	**PrePrep Method:** N/A			**Instrument:** SMARTCHEM	
Client ID: MPL 2-1113-1	**Prep Method:** 350.1			**Prep Date:** N/A	
Matrix: Water	**Analytical Method:** 350.1			**Cal Date:** 11/07/2013 12:33	
Workgroup #: WG451814	**Analyst:** BAF			**Run Date:** 11/07/2013 13:11	
Collect Date: 11/01/2013 15:25	**Dilution:** 1			**File ID:** SC131107001.048	
Sample Tag: 01	**Units:** mg/L				

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrogen, Ammonia	7664-41-7	0.0932	J	0.100	0.0500
J	Estimated value ; the analyte concentration was less than the LOQ.				

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Certificate of Analysis

Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** SMARTCHEM	
Client ID: MPL 2-1113-1		**Prep Method:** 353.2		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 353.2		**Cal Date:** 11/05/2013 10:23	
Workgroup #: WG451545		**Analyst:** BAF		**Run Date:** 11/06/2013 10:10	
Collect Date: 11/01/2013 15:25		**Dilution:** 4		**File ID:** SC13110811295301	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		6.88		0.200	0.100

Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** UV-120-1V	
Client ID: MPL 2-1113-1		**Prep Method:** SM4500-P-E-1999		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM4500-P-E-1999		**Cal Date:** 10/30/2013 09:00	
Workgroup #: WG451379		**Analyst:** DLP		**Run Date:** 11/02/2013 13:30	
Collect Date: 11/01/2013 15:25		**Dilution:** 1		**File ID:** 1V.1311021330-05	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Orthophosphate	14265-44-2	0.184		0.0500	0.0250

Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** OVEN	
Client ID: MPL 2-1113-1		**Prep Method:** 160.1/SM2540C		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** SM2540-C-1997		**Cal Date:**	
Workgroup #: WG451562		**Analyst:** ADG		**Run Date:** 11/05/2013 14:41	
Collect Date: 11/01/2013 15:25		**Dilution:** 1		**File ID:** EN.1311051441-06	
Sample Tag:		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Dissolved Solids		270		20.0	10.0

Sample #: L13110146-06		**PrePrep Method:** N/A		**Instrument:** TOC-VWP	
Client ID: MPL 2-1113-1		**Prep Method:** 415.1		**Prep Date:** N/A	
Matrix: Water		**Analytical Method:** 415.1		**Cal Date:** 07/09/2013 14:51	
Workgroup #: WG451372		**Analyst:** BAF		**Run Date:** 11/04/2013 23:43	
Collect Date: 11/01/2013 15:25		**Dilution:** 1		**File ID:** TC11042013.033	
Sample Tag: 01		**Units:** mg/L			

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Organic Carbon	TOC	1.33		1.00	0.500

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Certificate of Analysis

Sample #: L13110146-06	**PrePrep Method:** N/A	**Instrument:** OVEN
Client ID: MPL 2-1113-1	**Prep Method:** 160.2/SM2540D	**Prep Date:** N/A
Matrix: Water	**Analytical Method:** SM2540-D-1997	**Cal Date:**
Workgroup #: WG451642	**Analyst:** ADG	**Run Date:** 11/06/2013 06:59
Collect Date: 11/01/2013 15:25	**Dilution:** 1	**File ID:** EN.1311060659-24
Sample Tag:	**Units:** mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Total Suspended Solids		31.5		5.00	2.50

001 – BIO-CHEM TESTING WVDEP 220   002 – REIC Consultants, Inc. WVDEP 060
003 – Sturm Environmental   004 – MICROBAC PITTSBURGH
ADC – ANTHONY D. CANTER   ADG – APRIL D. GREENE
AJF – AMANDA J. FICKIESEN   AML – TONY M. LONG
AZH – AFTER HOURS   BAF – BRICE A. FENTON
BJO – BRIAN J. OGDEN   BLG – BRENDA L. GREENWALT
BRG – BRENDA R. GREGORY   CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS   CEB – CHAD E. BARNES
CLC – CHRYS L. CRAWFORD   CLS – CARA L. STRICKLER
CLW – CHARISSA L. WINTERS   CPD – CHAD P. DAVIS
CRW – CHRISTINA R. WILSON   CSH – CHRIS S. HILL
CTB – CHRIS T. BUCINA   DAK – DEAN A. K
DCM – DAVID C. MERCKLE   DDE – DEBRA D. ELLIOTT
DEV – DAVID E. VANDENBERG   DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER   DLP – DOROTHY L. PAYNE
DLR – DIANNA L. RAUCH   DSM – DAVID S. MOSSOR
ECL – ERIC C. LAWSON   EDL – ERIN D. LONG
ENY – EMILY N. YOAK   EPT – ETHAN P. TIDD
ERP – ERIN R. PORTER   FJB – FRANCES J. BOLDEN
HJR – HOLLY J. REED   JBK – JEREMY B. KINNEY
JDH – JUSTIN D. HESSON   JKS – JANE K. SCHAAD
JLL – JOHN L. LENT   JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES   JYH – JI Y. HU
KDW – KATHRYN D. WELCH   KEB – KATIE E. BARNES
KHR – KIM H. RHODES   KRA – KATHY R. ALBERTSON
KRB – KAELY R. BECKER   KSC – KELLY S. CUNNINGHAM
LKN – LINDA K. NEDEFF   LLS – LARRY L. STEPHENS
LSB – LESLIE S. BUCINA   MBK – MORGAN B. KNOWLTON
MDA – MIKE D. ALBERTSON   MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING   MLW – MATTHEW L. WARREN
MMB – MAREN M. BEERY   MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON   PDM – PIERCE D. MORRIS
PIT – MICROBAC WARRENDALE   PSW – PEGGY S. WEBB
QX – QIN XU   RAH – ROY A. HALSTEAD
REK – BOB E. KYER   RLB – BOB BUCHANAN
RM – RAYMOND MALEKE   RNP – RICK N. PETTY
RS – ROSEMARY SCOTT   RWC – RODNEY W. CAMPBELL
SAV – SARAH A. VANDENBERG   SEP – SUZANNE J. PAUGH
SLM – STEPHANIE L. MOSSBURG   SLP – SHERI L. PFALZGRAF
TMB – TIFFANY M. BAILEY   TMM – TAMMY M. MORRIS
TPA – TYLER P. AMRINE   VC – VICKI COLLIER
WJB – WILL J. BEASLEY   WTD – WADE T. DELONG
XXX – UNAVAILABLE OR SUBCONTRACT

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Greater than
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
CT1	The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the LOQ.
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
JB	The reported result is an estimated value. The reported result is also associated with a contaminated method blank.
JQ	The reported result is an estimated value and one or more quality control criteria failed. See narrative.
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL/MDL).
ND, CT1	Analyte was not detected. The concentration is below the reported LOD. The cooler temperature at receipt exceeded reg
ND, H1	Not detected; Sample analysis performed past holding time.
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

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CHAIN-OF-CUSTODY RECORD

COC No. A 38153

Phone: 740-373-4071
Fax: 740-373-4835

158 Starlite Drive
Marietta, OH 45750

Company Name: C B & I

Project Contact: Mark Lyon
Contact Phone #: 505-262-8920

Turn Around Requirements: Normal
Location: WSMR STP

Project ID: WSMR STP

Sampler (print): Bradley T. Davis
Signature: Bradley Davis

Program:
- [ ] CWA
- [ ] RCRA
- [ ] DOD
- [ ] AFCEE
- [ ] Other

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	CN - Total	CN - Amenable	CN - Free	Metals = Sb, As, Ba, Be,	Cd, Cr, Co, Cu, Pb, Ni, Se,	Ag, Tl, Sn, V, Zn, Hg	Chloride, Fluoride, Sulfate	Ammonia - N	Nitrate + Nitrite - N	pH, Spec. Conductance	TDS, TSS, TOC	Alkalinity	PO4	Na, K, Mg, Mn	TOTAL # (LAB USE)	ADDITIONAL REQUIREMENTS
MPL4-1113-1		X	11-1-13	1030	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MPL4-1113-ms		X	11-1-13	1030	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Matrix Spike
MPL4-1113-msd		X	11-1-13	1030	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		Matrix Spike Duplicate
MPL3-1113-1		X	11-1-13	1330	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MPL3-1113-2		X	11-1-13	1330	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MPL2-1113-1		X	11-1-13	1525	W	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Relinquished by: (Signature) Bradley T. Davis
Date: 11-1-13
Time: 1700 1600

Receiv (Signal

Relinquished by: (Signature)
Date:
Time:

Receiv (Signal

Microbac OVD
Received: 11/02/2013 09:00
By: CARA STRICKLER
Cara Strickler

2210000044595

Received by: (Signature)
Date:
Time:

Remarks:

Page ___1___ of ___1___

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Internal Chain of Custody Report

Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum   **Container ID**   **Products**
L13110146-01   272092   300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:38	JBK	CLS	

Samplenum   **Container ID**   **Products**
L13110146-01   272093   ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

Samplenum   **Container ID**   **Products**
L13110146-01   272094   PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

Samplenum   **Container ID**   **Products**
L13110146-01   272095   TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

Samplenum   **Container ID**   **Products**
L13110146-01   272096   TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum	Container ID	Products
L13110146-01	272097	AG-MS AS-MS BA-MS BE-AX CA CD-MS CO-MS CR-MS C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L13110146-01	272098	CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

Samplenum	Container ID	Products
L13110146-02	272099	300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:38	JBK	CLS	

Samplenum	Container ID	Products
L13110146-02	272100	ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum   **Container ID**   **Products**
L13110146-02   272101   PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

Samplenum   **Container ID**   **Products**
L13110146-02   272102   TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

Samplenum   **Container ID**   **Products**
L13110146-02   272103   TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

Samplenum   **Container ID**   **Products**
L13110146-02   272104   AG-MS AS-MS BA-MS BE-AX CA CD-MS CO-MS CR-MS (

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		>2

Comments:Added 5ml HNO3 Lot#: RGT 28449 11/04/13 @ 1500 to each sample ID. PH

Sample extract/digestate/leachate

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac®

Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum	**Container ID**	**Products**
L13110146-02	272105	CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

Samplenum	**Container ID**	**Products**
L13110146-03	272106	300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:38	JBK	CLS	

Samplenum	**Container ID**	**Products**
L13110146-03	272107	ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

Samplenum	**Container ID**	**Products**
L13110146-03	272108	PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

Samplenum	**Container ID**	**Products**
L13110146-03	272109	TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L13110146-03	272110	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L13110146-03	272111	AG-MS AS-MS BA-MS CA CD-MS CO-MS CR-MS CU-MS ⊢

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		>2

Comments:Added 5ml HNO3 Lot#: RGT 28449 11/04/13 @ 1500 to each sample ID. PH

Sample extract/digestate/leachate

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L13110146-03	272112	CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L13110146-04	272113	300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:39	JBK	CLS	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum	Container ID	Products
L13110146-04	272114	ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:44	RS	BAF	

Samplenum	Container ID	Products
L13110146-04	272115	PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

Samplenum	Container ID	Products
L13110146-04	272116	TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

Samplenum	Container ID	Products
L13110146-04	272117	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum   **Container ID**   **Products**
L13110146-04   272118   AG-MS AS-MS BA-MS BE-AX CA CD-MS CO-MS CR-MS C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

     Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		>2

Comments:Added 5ml HNO3 Lot#: RGT 28449 11/04/13 @ 1500 to each sample ID. PH

     Sample extract/digestate/leachate

Samplenum   **Container ID**   **Products**
L13110146-04   272119   CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

Samplenum   **Container ID**   **Products**
L13110146-05   272120   300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:38	JBK	CLS	

Samplenum   **Container ID**   **Products**
L13110146-05   272121   ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum	Container ID	Products
L13110146-05	272122	PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

Samplenum	Container ID	Products
L13110146-05	272123	TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

Samplenum	Container ID	Products
L13110146-05	272124	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

Samplenum	Container ID	Products
L13110146-05	272125	AG-MS AS-MS BA-MS BE-AX CA CD-MS CO-MS CR-MS (

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		

Sample extract/digestate/leachate

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum   **Container ID**   **Products**
L13110146-05   272126   CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

Samplenum   **Container ID**   **Products**
L13110146-06   272127   300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	SEM	06-NOV-2013 09:38	JBK	CLS	

Samplenum   **Container ID**   **Products**
L13110146-06   272128   ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	06-NOV-2013 09:05	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

Samplenum   **Container ID**   **Products**
L13110146-06   272129   PO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	A1	04-NOV-2013 14:06	CLS		
2	PREP	A1	WET	04-NOV-2013 15:16	PSW	CLS	
3	STORE	WET	A1	07-NOV-2013 13:45	RS	BAF	

Samplenum   **Container ID**   **Products**
L13110146-06   272130   TSS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	ANALYZ	W1	WET	05-NOV-2013 06:43	ADG	AZH	
3	STORE	WET	A1	12-NOV-2013 09:13	RS	ADG	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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Login: L13110146
Account: 3005
Project: 3005.011
Samples: 6
Due Date: 15-NOV-2013

Samplenum	Container ID	Products
L13110146-06	272131	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		<2
2	ANALYZ	W1	WET	04-NOV-2013 16:13	BAF	RS	
3	STORE	WET	A1	07-NOV-2013 15:48	CLS	DCM	

Samplenum	Container ID	Products
L13110146-06	272132	AG-MS AS-MS BA-MS BE-AX CA CD-MS CO-MS CR-MS (

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		
2	PREP	W1	DIG	05-NOV-2013 05:39	REK	AZH	
3	ANALYZ*	DIG	METALS	05-NOV-2013 12:55	PDM	REK	
4	STORE	DIG	A1	07-NOV-2013 14:45	CLS	ERP	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-NOV-2013 14:06	CLS		

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L13110146-06	272133	CN-WD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	04-NOV-2013 14:06	CLS		
2	ANALYZ	WET	A1	11-NOV-2013 16:47	CLS	PSW	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

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